Volunteer Firemen

DECEMBER 1943

NATIONAL FIRE PROTECTION ASSOCIATION INTERNATIONAL
60 Batterymarch Street Boston 10, Massachusetts

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FIRES! in inaccessible places are quickly and safely handled with FOGNOZL

FOGNOZL—THE METHOD OF TOMORROW

Fires that are difficult to reach may now be extinguished under the protection of a fog screen.

Attic fires, basements, vaults, prison cells, engine rooms on land and sea, holds of ships, airplane cock-pits, mines, storage rooms, spray booths, kettles containing flammable liquids, and many other confined fires are quickly controlled with ALL-PURPOSE FOGNOZLS.

In the above photographs a fire was caused in an underground conduit by heated electric wires. This took place in a large Pacific Coast city. Few fires are so inaccessible and this type of fire develops the heat of an incinerator.

To attempt to extinguish this fire with a straight stream would mean almost flooding the whole neighborhood conduits. With this ALL-PURPOSE FOGNOZL this fire was extinguished in a few seconds and the water damage was reduced to the point where it was of no consideration at all.

Note in the photographs the old straight stream nozzle discarded and forgotten.

● **FOGNOZL FACTS**—PREPARE BY ACCUMULATING DATA ON THIS NEW WATER FOGNOZL FIRE-FIGHTING METHOD THAT HAS REVOLUTIONIZED OLD METHODS. FOGNOZL ACCOMPLISHMENTS ARE DAILY EMPHASIZED BY OUR ARMED FORCES ● A BROCHURE OF **FOGNOZL FACTS** WILL BE SENT, WITHOUT OBLIGATION, TO THOSE ENGINEERS OR EXECUTIVES WHO WILL SO REQUEST IT ON THEIR OFFICIAL OR DEPARTMENT LETTERHEAD.

IN FOLDER CONVENIENT FOR YOUR FILE

- PROTECTION TO PERSONNEL
  TO FIREMEN AND FIRE VICTIMS
- RAPID EXTINGUISHMENT
  A MATTER OF SECONDS
- REDUCED WATER DAMAGE
  A RATIO OF 1 TO 30
- ECONOMY & AVAILABLE SUPPLY
  PLAIN WATER

GRISWOLD ORIGINAL WATER FOGNOZL

A PRIZE FOR THE BEST

A prize is hereby offered for the best "still" photographs showing the sequences of extinguishing fires occurring in the United States and Canada, with any of our FOGNOZLS, old style or new. The photographs in this advertisement are a sample. We reserve the right to use any or all photographs for advertising purposes and any sent in are sent to us with this understanding. The only compensation is the prize to the best pictures. The prize? Why a FOGNOZL, of course.

FOG NOZZLE COMPANY

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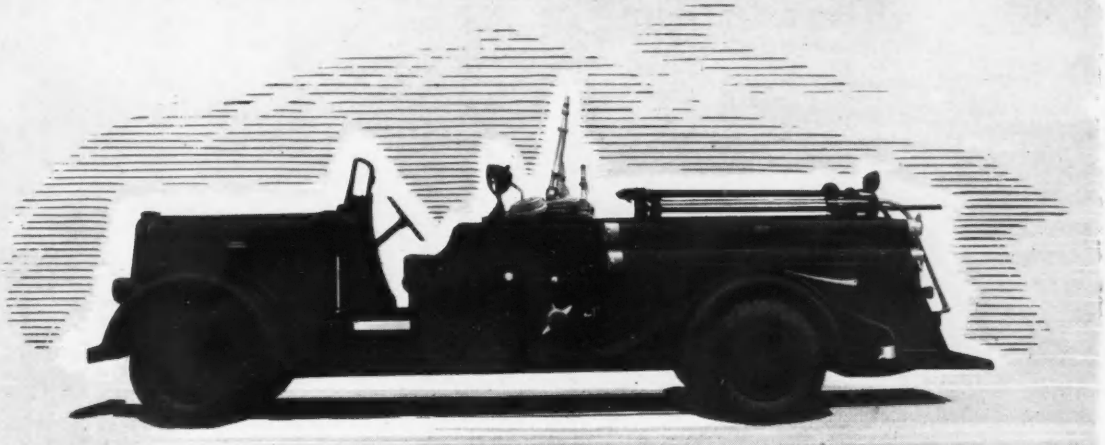
FOG NOZZLE OF CANADA, LTD., MONTREAL, CANADA

18,500 lbs. of Cure



QUICK FACTS

(About Model 150-T illustrated)

- Length: 25 feet 3 inches.
- Weight (empty): 15,000 lbs.
- Wheelbase: 192 inches.
- Turning Radius: 35 feet.
- Horsepower: 235.
- Pump: 1000 g. p. m., 2-stage Centrifugal, Rotary, optional.
- Booster Tank: 150-350 gallons.
- Hose Capacity: 450 feet ¾ inch Hose; 300 feet 1 inch Hose.

WE AGREE that in the fire field an ounce of prevention is worth a pound of cure. Pictured above, however, is the most effective nine and one-quarter tons of cure available to fire fighters. It is a model 150-T Ward LaFrance triple combination pumper recently delivered to the City of Minneapolis.

There is a Ward LaFrance pumper to meet the exact needs of any community. Let Ward LaFrance engineers help you to attain maximum protection for your community.

WARD LAFRANCE TRUCK DIVISION

ELMIRA ★ GAI NEW YORK

★ WARD LAFRANCE ★

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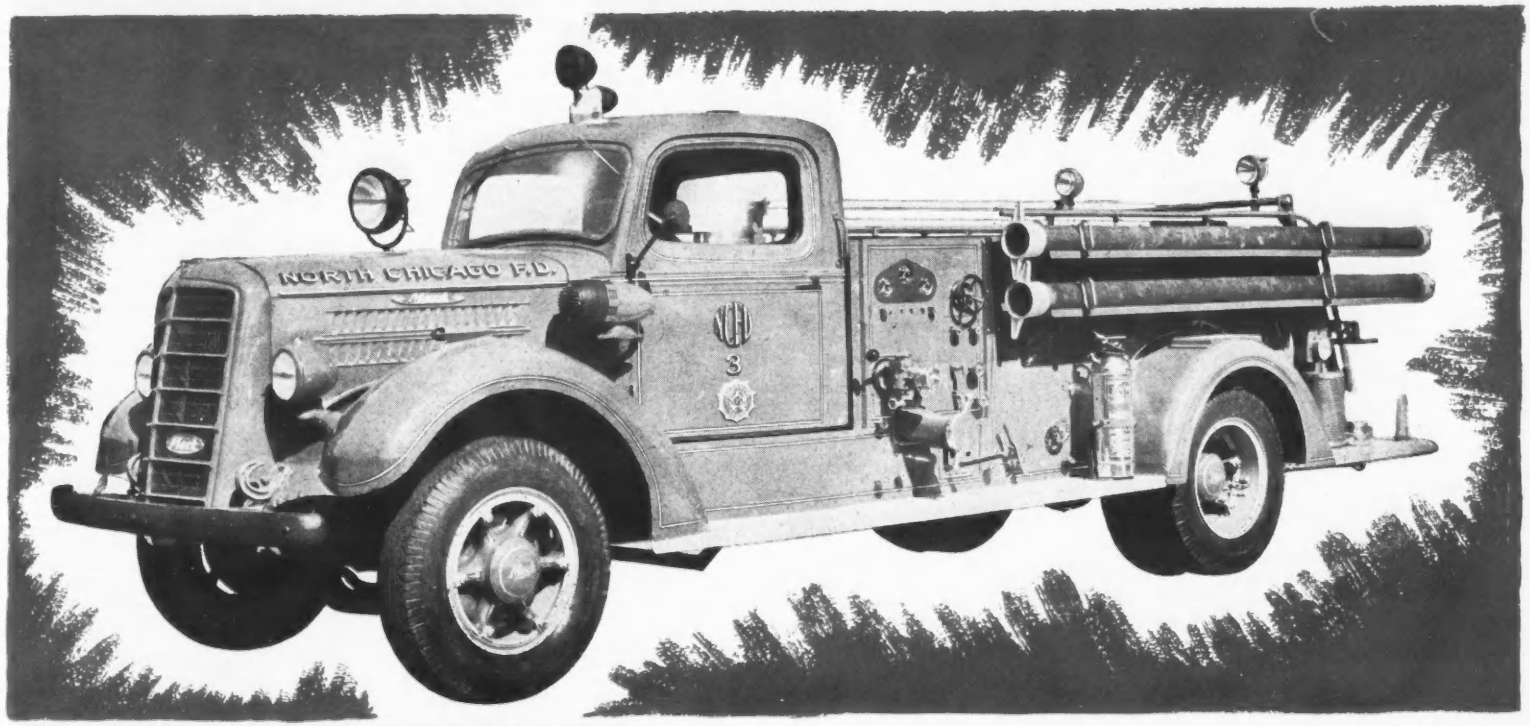

MACK TYPE 50 500-GALLON PRESSURE VOLUME CENTRIFUGAL PUMPER.

***Watch a fireman's eyes light up when he sees a Mack. He knows that protection of lives and property depends on the reliability of fire-fighting equipment*—and reliability is a Mack byword.**

Buy War Bonds

Mack
FIRE APPARATUS

If your community needs additional fire-fighting equipment or replacements, and if you can obtain permission from the War Production Board—think of Mack. Remember, Mack Fire Apparatus is backed by the greatest engineering resources in the industry.

MACK MANUFACTURING CORPORATION, FIRE ENGINE DIVISION, EMPIRE STATE BUILDING, NEW YORK, N. Y.

IF YOU'VE GOT A MACK, YOU'RE LUCKY... IF YOU PLAN TO GET ONE, YOU'RE WISE!

Volunteer Firemen

THE cover picture this month (U. S. Navy Department photo) shows a tanker burning at sea after an enemy attack. This is one of the types of fires that the valiant fire-fighting crews of the Navy are called upon to fight. A report of a successful fire-fighting job on a similar tanker fire appears on page 6 of this issue.

HAS your department recently cautioned citizens regarding winter fire hazards? The following excerpts from a news release by Fire Marshal E. J. Ryan, Chief of the Aurora, Illinois, fire department, may suggest the type of article that will be acceptable to the local newspaper.

"The war has brought new fire dangers to many homes. Take the case of someone who has converted from oil to coal. Maybe he used to fire a coal furnace years ago, but now he's a little rusty at it. In that case, he should get an expert to show him how. Many coal gas explosions are caused by faulty banking, and a draft that isn't regulated right can cause the furnace to overheat and start a fire. If you have stored extra supplies of coal, try to arrange the bins so that the coal first laid down is the first used. If you plan to use portable electric, gas, or kerosene heaters during cold spells, see that they are in good condition. When you use them see that they are not too close to woodwork, curtains or furniture, or in places where they may be upset."

Chief Ryan also included warnings about the old standby dangers of winter heating such as cracked or dirty chimneys and flues, defective furnaces, pipes too near woodwork, and improper storage of hot ashes.

WHEN advising householders about precautions against winter fires, fire departments must not forget that their own apparatus and appliances need protection against the cold. Such items as radiators, pumps, and batteries need just a little more attention. Booster lines will have to be carried dry in cold climates.

Plans also will have to be made for keeping hydrants free from ice and snow. Some departments place a marker near each hydrant with small reflectors attached so that they can quickly spot the hydrant if it is buried by snow drifts. Other departments in northern areas, subject to blizzards, place markings on telephone and telegraph poles nearest to each hydrant, indicating the direction and number of feet to the hydrant. This saves a lot of hunting through drifts during a snowstorm to find a hydrant.

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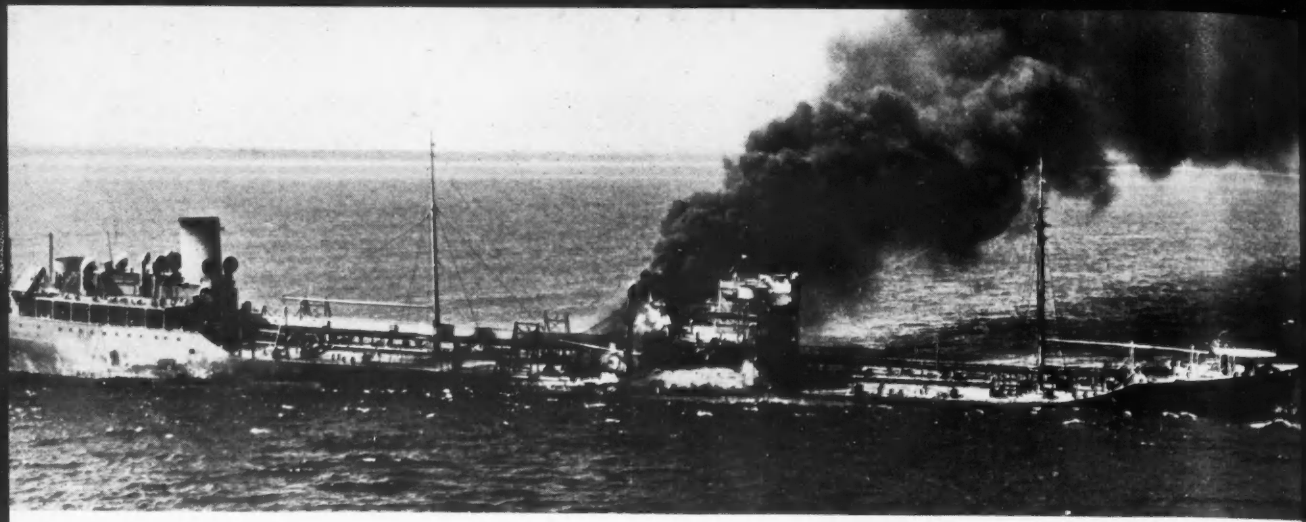
THE business district of Berea, Ohio (population 6,000), had a serious fire during Fire Prevention Week, according to an interesting report furnished by the Ohio Inspection Bureau. The manager of a chain grocery located in a block of two-story brick business buildings had been given orders to clean out rubbish. He had some burned in the furnace but some had been piled on a river bank behind the building by employees. A large open porch on which numerous baskets were stored extended over this river bank. The rubbish on the river bank, about twenty-five feet below the level of this porch, was set afire by an employee.

A tenant in a neighboring building phoned to the fire chief and complained about the bonfire. The chief investigated and ordered paid firemen on duty to take a pump tank extinguisher and put out the fire, working from the porch. When this attempt failed a small booster apparatus was driven from the fire station about a block away and a small line was taken into the basement.

Delay in getting water on the fire is reported to have allowed the baskets on the porch to ignite. Unsuccessful efforts were made to push the baskets off the porch. All persons were then ordered from the building and an alarm was sounded to call volunteer firemen. Help was also called from nine surrounding departments. Seven hose streams were supplied by pumpers, several of which took suction from the river and from a quarry hole. Four buildings, housing seven stores and a number of apartments suffered losses totaling $67,500.

This is one case where a fire prevention clean-up order backfired. Of course, the fire might have been worse had the rubbish ignited in the basement during the night causing a fire that trapped occupants in the upstairs apartments. The burning of the rubbish on the river bank under the back porch would appear to have been a violation of state law, which requires a permit and the owner's permission for outside fires. This fire shows that when ordering rubbish removed, the fire department must caution occupants against burning the rubbish in a place that will endanger property.

This fire also shows that when a fire is reported in a location that may prove dangerous to exposed property, an effective stream of water cannot be placed in operation too quickly. Many fire departments have given up the practice of treating such calls as rubbish fires, bonfires, and chimney fires as "still alarms." At least enough men and apparatus to provide one or two good hose streams should be sent out on the first call.



"Official U. S. Navy Photograph."

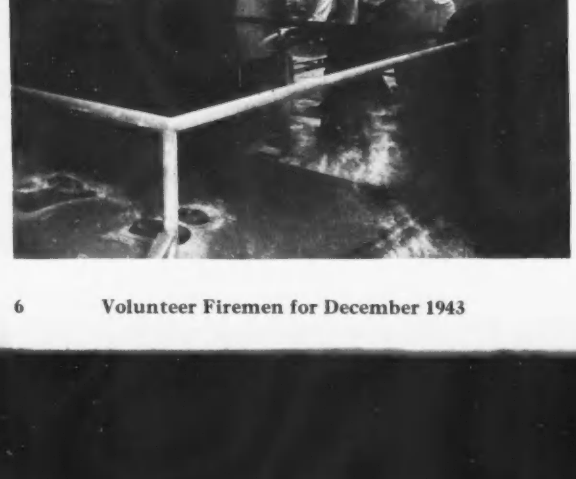
Firemen of the Fleet

By William Adams

WHEN a fully-loaded tanker collided with an ammunition ship off Norfolk early on one dark morning this past summer, the ammunition ship promptly exploded and sank, but the tanker, much of its cargo in high octane gasoline, was salvaged by the Navy's firefighters, and most of its 107,000 barrels of assorted petroleum was saved. In describing the salvage operation on the tanker, the Navy revealed the intensive firefighting experience given naval personnel in the vicinity of Norfolk. There any situation firefighters are likely to meet in vessels afire at sea are carefully duplicated, and firemen wearing the most modern protective clothing obtainable, practice in specially-built hulls, using chemicals which have already saved many cargoes and ships in this war.

The fire described above was fought more than fifty miles off the coast, for thirty-seven and one-half hours. Almost as soon as the low thunder of the explosion was heard the Navy's firefighting machinery was in operation. The man in the street paused for a moment, pessimistically assumed that another Axis torpedo had found its mark and that the United Nations were poorer by another vessel. But they were wrong. The tanker, only a year old and worth $3,500,000, was reached within a matter of hours by the Navy's firefighters. By then nothing could be done for the ammunition ship or its crew. But the tanker was a problem in firefighting made-to-order for the Navy.

"Official U. S. Navy Photograph."



The cargo discharge pipes running from stem to stern of the tanker ruptured when the ships collided, and by the time the first Navy tug reached the spot, the tanker's cargo was aflame in several places. Heat was so intense that every member of the crew was forced to go over the side. A pump man at his station deep within the bowels of the ship felt the convulsive shudder of the collision, sensed that the tanker was losing headway and rushed out on deck just as the lights went out. He found the decks covered with flame, and ran to his emergency post to flood the ship with a special fire-fighting compound designed to combat that sort of fire.

By this time the tanker was almost dead in the water, she was settling by the bow, where the collision had almost torn off her forepeak, and the fire was spreading. When the pump man finally reached his station, he found valves and wheels of the mechanism too hot to touch. He took the only course remaining to him. He followed the other crew members over the side. He later told a naval board of inquiry that he had felt the jar of the collision but had no remembrance at all of the blast, heard fifty miles away, that marked the end of the ammunition ship!

So intense was the heat that bronze and brass fittings melted and ran to the deck, cable gear snapped and a spare propeller, which had been lashed to the deck for transport to a port on the other side of the world, had one of its fins melted off. With daylight, naval patrol planes commenced hovering over the tanker, against the chance that a submarine attracted by the high column of greasy smoke would send a torpedo into her to complete the disaster.

First to reach the blazing tanker were ten men on a tug from the fire-fighting school at Little Creek, Va. Their tug

was equipped with a pump whose capacity was only five hundred gallons per minute. These men boarded the tanker, put a line to her and jettisoned the exploding ammunition for her deck guns. Before heat drove these men also over the side, the tanker was towed at two knots into the wind, headed toward a distant shoal. Twelve hours after the collision thirteen other men arrived with proper fire-fighting equipment and a special chemical foam.

Wearing asbestos clothing, these firemen soon had the help of fourteen other men, similarly garbed, who spread the foam chemical about with such abandon that within twenty-four hours, with the fire at its height, both crews ran out of foam. Seven hours passed before a new supply was received from the fire-fighting base at Norfolk. Before the fire was finally extinguished, more than twenty tons of the foam had been used, together with one thousand gallons of another liquid chemical.

But putting out the fire was no easy task. The cargo space on the left forward side of the vessel was open to the sea, and the swells sucked and surged into this area, removing all the foam almost as soon as it could be applied. The advancing and retreating water brought with it new supplies of oxygen which set off other explosions in the vessel's interior.

In order to hold the foam in place, hasty cofferdams of empty drums were erected. By evening of the next day the fire had been put out. The fire had burned, therefor, for thirty-seven and one-half hours. Net gain to the Navy was seventy per cent of the tanker's precious cargo. A more concrete gain was the salvage of the hull itself, which $400,000 worth of steel and labor will place back in operation. As soon as the vessel cooled off sufficiently for torchmen to board her, a crew of men supplied by the owners and with welding apparatus cut away all the damaged superstructure, handrails and damaged winches and gear.

The vessel was then towed to port, where she rests today, a dismal-looking craft indeed, with an enormous slice out of her on the forward port side, and her paint scaling off in great patches from stem to stern. But she is a great source of pride to the Navy, which feels with some reason that she represents a major triumph over fire at sea, greatest menace known to sailors, in peace as well as in wartime.

A Christmas Reminder!

CHRISTMAS is a time of joy that should not be marred by needless and preventable holiday season fires due to faulty Christmas tree lighting, open candles improperly placed or flammable decorations. An attractive red and green Christmas-fire-prevention folder, entitled "Make this a Safe Christmas," is being mailed to each N.F.P.A. Member with the December News Letter.

HOW NOT TO DO IT!

I happened to be driving through the town of —— and had an opportunity to witness the operation of the local volunteer fire department in fighting a fire in a two and one-half story frame dwelling having wooden shingle roof and siding. What I saw was a perfect example of all that a volunteer fire department should not do. While the fire was largely in the attic, no effort was made to get water into the attic, but a number of hose streams were directed on the outside of the roof. Attic windows on three sides and the inside stairway would have permitted relatively easy access. The fire finally burned through the roof and hose streams were directed through the burned opening. The resulting deluge of water probably caused practically a total loss. At one stage in the fire two men were holding a nozzle while a feeble stream trickled out with a reach of only five or ten feet. At the same time on the other side of the building, one man was struggling desperately, single-handed, to hold a nozzle operating under high pressure. Presently a second man joined him and this stream was used to tear a large part of the shingles off the side of the house, well below where there was any fire. There was an ample number of men present, three or four pumpers, an adequate water system, plenty of hose and equipment. There had been plenty of time to remove furniture; the neighbors did the usual job of carrying things out with a good deal of incidental damage. A newspaper photographer was present and took the above picture. This volunteer fire department is not a member of the N.F.P.A. Volunteer Firemen's Section.

—ROBERT S. MOULTON

HOME DEHYDRATOR FIRE

WITH the September News Letter N.F.P.A. members received a bulletin on "Home Dehydration Hazards." Subsequently, W. Dean Johnston, Secretary, Orange County Farmers Mutual Fire Insurance Company, Santa Ana, California, sent in the picture of a typical home dehydrator fire together with the following comments:

"The very day your pamphlet arrived warning about the hazards of home dehydrators, the fire, as shown by the enclosed pictures occurred. In this case the driver of the gasoline delivery truck did not know that the dehydrator was burning. Not more than 20 gallons of gasoline had been emptied into the underground tank when the flash occurred. The truck was driven out of danger and only the prompt action of the owner, who reached home at that particular minute, saved a loss of several thousand dollars."

Mr. Johnston explains further that fill pipe for fuel tank was just inside door at right. Such fill pipes do not meet N.F.P.A. standards. Hose to dehydrator may be seen coming from bottom of door at left.

Navy fire-fighter crews help the Rockland firemen fight a fire in the Moffitt, Coakley and Leach Block. At right firemen are shown directing a stream on the fire where it has come through the roof.

BUILT TO BURN

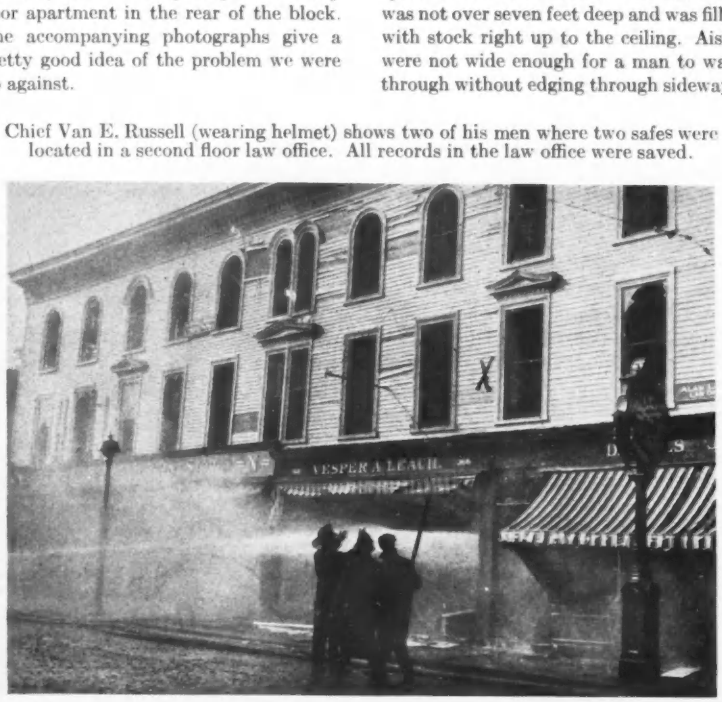
By Chief Van E. Russell
Rockland Fire Department

AT 3:30 A.M., on September 29, 1943, the fire department of Rockland, Maine, received an alarm for a fire in the huge old three-story wooden Moffitt, Coakley, and Leach Block. This proved to be one of the toughest fires that our department has had to handle in recent years. The fire started in the basement of the J. J. Newbery Ten Cent Store and extended through the entire block. The loss has been estimated at approximately $80,000. There was no loss of life in this blaze but we rescued one elderly lady from a top floor apartment in the rear of the block. The accompanying photographs give a pretty good idea of the problem we were up against.

This was typical of most large fires in that it occurred during the early morning hours and was not discovered promptly. The first alarm came from the police department. The police hollered to the firemen as both departments are housed in a station about one hundred feet from the fire.

We were quickly on the scene and found that the fire had an awful start in the basement of the J. J. Newberry store. This store occupied one-half of the basement space of the entire block. The basement was not over seven feet deep and was filled with stock right up to the ceiling. Aisles were not wide enough for a man to walk through without edging through sideways.

Chief Van E. Russell (wearing helmet) shows two of his men where two safes were located in a second floor law office. All records in the law office were saved.



Our initial effort to control the blaze consisted of an attempt to cut off the fire from the front. The basement was not accessible from the rear. We ventilated as much as possible over Newberry's store but soon found that it was impossible to prevent the fire from mushrooming through open ceilings and partitions. The building had no cut-offs and no fire protection of any type. There were many open partitions and wall spaces. Between the basement of the Newberry store and the rest of the cellar area was only a plank partition. There were two-inch openings between the planks. Two years ago the owners of this block were requested to put in a concrete wall to replace this partition. Had this been done we could have confined the fire to Newberry's basement and street floor.

Fighting this fire we used 5 pumpers, 5 hose trucks, 1 ladder truck and 1 ambulance. There were eleven streams supplied by 4,200 feet of 2½-inch hose. For 6 hours we used about 3,500 gallons per minute from pumpers stationed at hydrants on 10 and 12-inch mains, all within 600 feet of the fire. Pressure on the mains was approximately 95 pounds. Pumpers of 500 gallons per minute capacity were operated at 140 pounds discharge pressure but our 750-gallon Mack centrifugal pumper was discharging at 220 pounds pressure. A heavy stream from a monitor nozzle used at the front of the burning building may be seen in several of the photographs.

One item of interest in connection with the use of the fire streams was that the stream operated from a ladder at the roof (as shown in several of the pictures) tore considerable gravel from the roof and

View of the rear of the building after the fire was out showing: *A*. Location of law office on the second floor, jewelry store on the street floor. *B*. Location of J. J. Newbury store. *C*. Annex to J. J. Newberry store. An open basement extends under the annex and the main store. *D*. The annex to Leach's store. There is no basement under this annex and no means of access to the basement of Leach's store from the rear. The arrow in the upper right-hand corner of the picture locates the apartment from which an elderly woman tenant was rescued.

hurled it into the street below. This endangered store windows across the street. To prevent these windows from breaking, the awnings were lowered and the exposed windows were also protected by salvage covers.

There was another point that may be of interest in these days of scarcity of expert help. I had 5 pumpers working on this fire. Some of the operators knew how to run their motors and pumps but knew nothing about the capacity of water mains or when they were operating so as to hinder the performance of other pumpers. My method is to have my most experienced operator, who knows our water supply and knows what is required to develop an efficient stream for the particular spot where it is to be used, supervise all the pumpers in operation. By that method we have never had any failures in our efforts to develop satisfactory streams. Our fire jobs in town call for a lot of short lines. It is also a common occurrence for us to lay a single line a mile long for use at rural fires.

In this particular fire we feel that we did a good job in saving a substantial portion of the contents of the block and in preventing complete destruction of the building. It is estimated that property saved from destruction had a value of approximately $50,000. The J. J. Newberry store, where the fire started, and the Vesper A. Leach dry goods store suffered the greatest loss. However, we were able to save a high percentage of the value exposed in the jewelry store in the block and saved all the contents of a law office.

Versatile Army Jeep Has New Fire-Fighter Role

EARLY in 1942 the question of having a highly mobile pumping unit, mainly for fire-fighting purposes, was brought to the attention of the Fire Marshal's Section of the Canadian Army. Up to that time the Canadian Army had been manufacturing its own standard Army fire trucks. These being of the 3-ton class obviously were not suitable for small areas or areas difficult of access. The difficult terrain and almost impassable roads, if any, in locations where Army installations are found makes fire protection a major problem.

The Fire Marshal's Section had thought of using jeep-type vehicles to meet this demand but there were many obstacles to surmount. After some months of research authority was obtained for the development of a jeep-type fire lorry. The designs were completed by the Fire Marshal's Section and the work was carried out at the Canadian Mechanical Transport Shop in Ottawa.

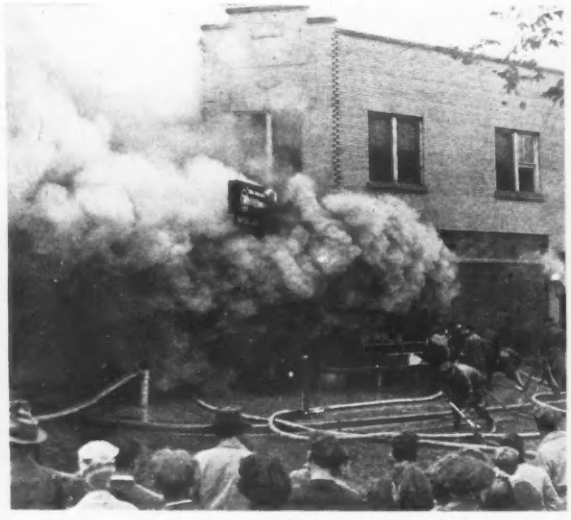
A standard ¼-ton 4 x 4 Model MB, 60-inch wheel base Willys Jeep was used. A front-mounted Barton centrifugal pump of 350 GPM was decided upon. After the pump was installed and in operation it was found that certain modifications had to be made to the body suspension of the vehicle in order to operate the pump most efficiently. Minor obstacles such as improvement of the inter-cooler system had to be made. The body was greatly modified to allow the carrying of sufficient hose and personnel to operate the unit. The accompanying picture shows a jeep fire truck before the installation of the pumping unit.

Canadian Army photo.

The following equipment is carried on the jeep: 1,000 feet of 1½-inch hose, 100 feet of 2½-inch hose, two 10-foot lengths of hard suction hose, 2 nozzles with 3 adjustable tips each, spanners, axe, shovel, crowbar, strainer, searchlight, first aid fire equipment, and a siamese 2½-inch to 1½-inch.

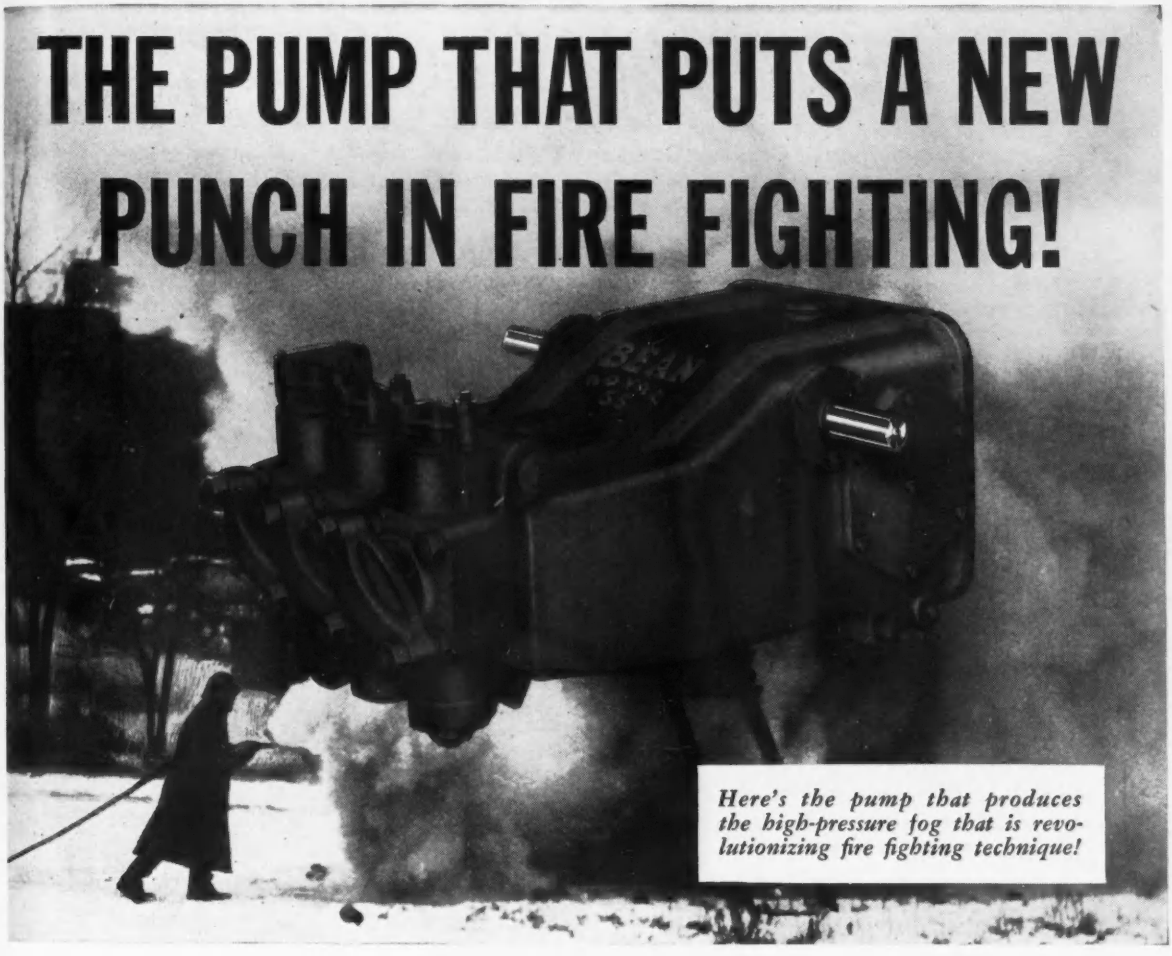
After workshop tests and fittings were complete the unit was put through an arduous test which showed that the unit exceeded expectations. Carrying its full load of hose and equipment and a crew of four the machine is highly maneuverable and, due to its low center of gravity, will hold its balance on unbelievably rugged terrain. Due to its compactness and comparatively light weight it can be air borne and put into service in isolated areas which can only be reached by air.

This Was A Smoky Cellar Blaze



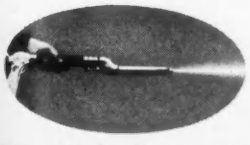
These pictures of a cellar fire that occurred in Kenosha, Wisconsin, on September 12th contain several details of interest to firemen. The blaze was started by the backfire of an automatic stoker and caused damage estimated at $20,000 by the newspapers to the store and apartment block. The picture at the left shows a fireman (extreme right) bringing up a bent cellar pipe while another man uses a hose clamp to shut off the line while the nozzle is changed. A regular playpipe has been placed under the shelter of a letter box where it will be quickly available if needed. Note that the hydrant was properly gated so that the second line could be connected without shutting off the water. The picture at the right shows the interior of the first floor after the fire was out. The effects of the intense heat are evident, and part of the first floor has dropped into the cellar, but the main body of the fire obviously has been held to the basement.

THE PUMP THAT PUTS A NEW PUNCH IN FIRE FIGHTING!



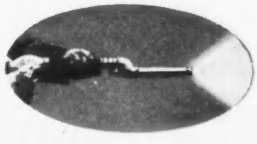
Here's the pump that produces the high-pressure fog that is revolutionizing fire fighting technique!

Delivers 600 lb. Pressure Fog at the Nozzle!

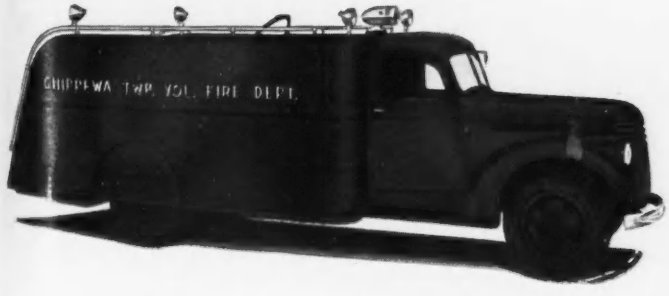


ONE MAN *handles Fog Fire Gun and hose. Stream can be adjusted with one hand.*

Efficient for use with 600 lb. or more nozzle pressure only.



FOG FIRE GUN *graduates from straight "power" stream to close-up fog.*



This 3 cylinder, all enclosed, oil bath, plunger type pump is the "heart" of the FMC Fog Fire Fighter. And what a fighting heart it is! Pumps 60 gallons of water a minute; built for much higher pressures it easily gives 600 lb. nozzle pressure (800 lbs. at pump) without overworking. Breaks up water so fine that one gallon properly used has the fire quenching possibilities of 35 low-pressure gallons. Makes fog that puts out fires faster with no water damage and no water shortage.

Don't confuse FMC High-Pressure Fog with *any other system.* There's nothing else like it for speed, for efficiency, for all-type fire protection. Proved on hundreds of fires all over the country. Get details from John Bean Mfg. Co., Lansing, Mich., or Bean-Cutler Division, Food Machinery Corporation, San Jose, Calif.

FMC FOG FIRE FIGHTERS *are low cost units. Carry own water and equipment. Several models.*

FMC *Original* FOG FIRE FIGHTER

FOOD MACHINERY CORPORATION

JOHN BEAN MFG. CO., 753 HAZEL ST., LANSING 4, MICH. • BEAN-CUTLER DIVISION, 453 JULIAN ST., SAN JOSE, CALIF.

Making Rope Last Longer

The Plymouth Cordage Company (Member N.F.P.A.) Has Issued Information on the Care of Rope that is of Vital Importance to Every Fire Department and Other Wartime Users of Rope.

THE supply of rope is limited. The Japs now control the Philippines, source of Manila fiber supply, and the Dutch East Indies, the source of Java Sisal, one of the next-best ropemaking fibers. There remain Sisal from Africa, a little from Haiti, Henequen from Mexico and some from Cuba, but the combined rope fibers from these sources, together with existing stocks, are not sufficient to take care of government and civilian requirements.

Our two-ocean navy, army and war industries need rope as never before. Stocks of all fibers, particularly Manila, must be conserved. There is no rope to spare, even in the emergency "Wartime" grade now being manufactured for civilian use. It is up to all of us to conserve rope by making it last longer through proper care and handling. By practicing the simple rules suggested here and taken from the Plymouth Cordage Company's booklet "Making Rope Last Longer," you can contribute your share to our war rope needs.

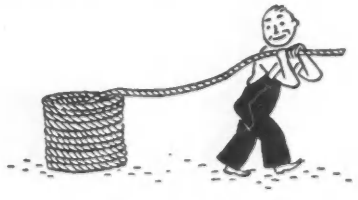
If every piece of rope now in use were made to last only 10% longer, through better care and handling, that would be the same as adding more than 15,000,000 pounds of fiber to our country's stockpile.

TO illustrate the importance of rope in war, we quote below the outfitting requirements for typical naval ships:

Type of vessel	*Rope required*
Battleship	34,075 feet
10,000-ton Light Cruiser	35,669 feet
Destroyer	10,980 feet

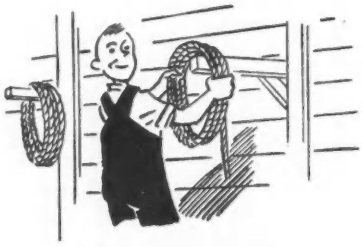
We must save on the home front to put rope on the war front.

In these critical times, it's more than just good sense to observe the following simple methods of making rope last longer. *It's a vital national need!* By putting these rules in action, with those who use and take care of rope, you are serving your country in a specific and important way.



Start It Right

When removing the usual right-laid rope from the coil, make sure that it unwinds in a counter-clockwise direction.

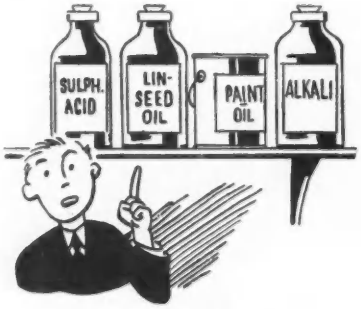


Store It Properly

A dry, unheated building or a room with a free-air circulation is the best place to store rope when not in use. Place rope in loose coils off the floor on wooden grating or hang on a wooden peg. If rope is dirty, wash thoroughly in clean water and dry before storing. Rope should never be stored in a small confined space without air circulation. Improper storage conditions are a common cause of the so-called dry rot.

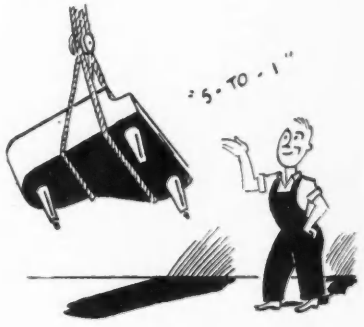
Kinks Are Avoidable

If the use of rope involves continual twisting in one direction, compensating turns must be thrown in or out to avoid damage to the rope's structure. Kinks pulled through restricted space, such as in a tackle block, will shear the fibers and weaken the rope.



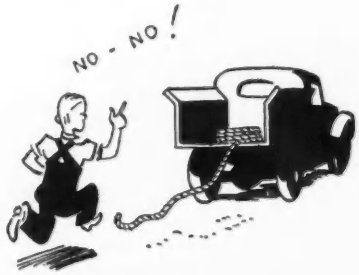
BEWARE of Chemicals

Many chemicals are very injurious to rope fibers and will cause severe rope damage. Rope should not be stored in close proximity to chemicals, expecially acids or alkalis, or where contact with chemicals or fumes may result. Common causes of rope injury are acids used in storage batteries and in washing the outside of buildings. Special care should be taken to prevent the contamination of rope by these acids to insure long rope service and safety. Drying oils, such as linseed oil, will damage rope. Rope life will be increased if rope is kept free from paint. Keep rope out of reach of animals as animal excreta will result in loss of rope strength.



Know Your Loads

Overloading your rope is costly and is dangerous to men and materials. The safety factor of a rope is the ratio between the minimum breaking strength and the load applied. A safety factor of 5 is recommended under ordinary circumstances. Due allowance for the condition of the rope should be made when determining the proper factor of safety.



Reduce Wear and Abrasion

Surface wear may come from allowing one rope to chafe another, or by dragging it over sharp or rough objects which cut or break the outer fibers. Dragging a rope over the ground will pick up sand, grit or other abrasive particles which work into the rope, rapidly cutting and abrading the inner fibers. Maximum stress on ropes is produced by small sheaves, in addition to

(*Continued on Page 20*)

Midwestern's Firemen's Suit

Combination Suit: Coat and Pants With Detachable Linings

Special combination suit of Midwestern Rubberized Coat and Bunker Pants, with detachable wool linings. Flexible elastic inner sleeve for wrist. Keeps out water, cold and sparks. All Midwestern coats are so equipped. The coat with Bunker Pants below are Midwestern's outfit No. 101.

1. Adjustable collar strap.
2. Reinforced collar band for lining.
3. Lining attached with quick snap buttons.
4. Corduroy lined collar.
5. Reinforced, double stitched seams.
6. Reinforced by rivets at points of strain.
7. Vertical seams in sleeve shoulders.
8. Inside of fabric, heavily napped cloth.
9. Midwestern safety snaps.
10. Two outside pockets.
11. Midwestern's Special Vanitex fabrics.
12. Lining edges reinforced with rubberized fabric.
13. Wool detachable lining.
14. 6-inch storm flap.

This wool lining can be added to any Midwestern Bunker Pants at a small additional cost.

See your local Midwestern Distributor for prices and literature, or write the factory.

★

Buy War Bonds

The World's Best Investment

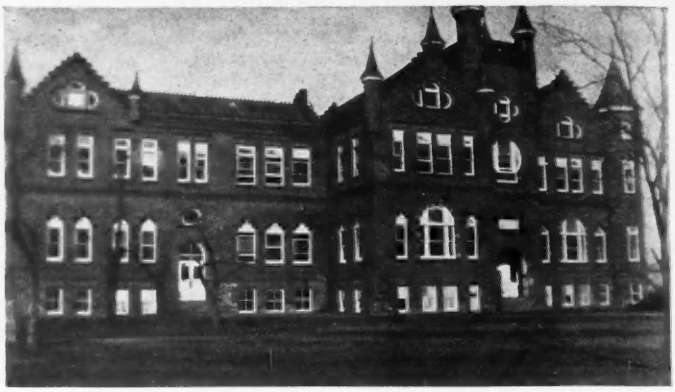
BUNKER PANTS

1. Lining held by snap buttons.
2. Rubberized fabric belt in lining.
3. Eight suspender buttons.
4. Safety snap on belt.
5. Two side and one hip pocket.
6. Wool lining.
7. Reinforced adjustable belt.
8. Midwestern's Special Vanitex fabrics.
9. Wide protecting flap.
10. Reinforced by rivets.
11. Cloth crotch pads for pole sliding.
12. Reinforced double stitched seams.

MIDWESTERN MFG. CO.

MACKINAW, ILLINOIS

Tactical Fire Defense for "Williams Hall" Oklahoma A & M College



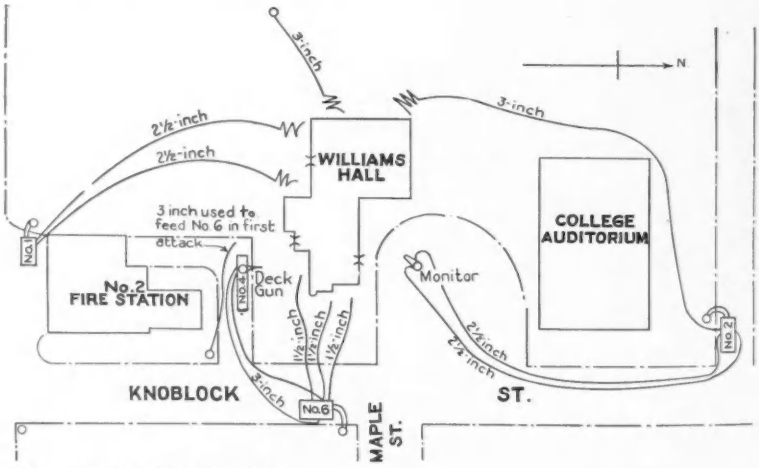
SEVERAL months ago we described the "Tactical Fire Defense" plan by which the fire department of Stillwater, Oklahoma, prepares to fight its fires in advance. In addition to general plans that are applicable for any important fire in the city, there are certain target risks for which individual plans of fire-fighting operations have been developed by Chief J. Ray Pence and his men. It is not possible to know just where a fire may break out in a building so the plans must be flexible to permit the attack to be pressed home at the proper point. However, the advance planning of important fire-fighting operations has certain definite advantages. 1. It makes certain that full advantage will be taken of the water supply that is available in the vicinity. 2. It makes sure that each pumper and other fire truck will be placed where it can be best utilized to develop it's full capacity. 3. It makes it possible to utilize the various companies in order of their arrival at a fire to the greatest advantage. 4. Last but not least, it familiarizes the members of the fire department with the problems they will face should a fire occur in one of these important buildings.

As a typical example of the way the "Tactical Fire Defense" is planned for an important building we have selected the fire defense outlined for the old Williams Hall at Oklahoma A. & M. College. This building is located directly behind the No. 2 fire station on the College campus. Underwriters' reports have described the building as follows: "An old building of fast-burning construction in poor structural condition, containing numerous fire hazards and having unreliable exit facilities." Here, indeed, is a challenge to a small fire department. The building is occupied by biology laboratories, lecture rooms, a print shop with paper storage, and dramatic art practice rooms. As shown in the accompanying picture the building is 3½ stories high, of brick-joisted construction.

The various fire-fighting plans and sketches are each drawn by a different member of the Stillwater Fire Department in order that each man will have a full understanding of these "battle plans." The plan for fighting a fire in old Williams Hall, as shown here, was drawn by Fireman Frank McFarlin.

Where "battle plans" are made in advance, and are understood by all members, the fire department can be reasonably sure that all hands will work together with the proper teamwork even if certain members, including the chief, do not happen to be available "when the bell hits."

It is interesting to note the extensive use made of 3-inch hose by the Stillwater Fire Department. The friction loss in 3-inch hose is only two-fifths as much as in 2½-inch hose. For example, 300 gallons per minute flowing through a line of 3-inch hose causes a loss of about 8 pounds pressure per 100 feet of hose. The same flow through a 2½-inch hose causes 21 pounds pressure loss. The 3-inch hose is heavy to handle and is best used when laid out by truck for supplying heavy streams from the ground. It is not considered suitable for inside work. However, they have husky firemen in Oklahoma who are not afraid to wrestle with man-sized hose. A few fire departments, notably San Francisco and Oakland, California, have attempted to compromise between the advantages of 2½-inch and 3-inch hose by using 2¾-inch hose. In cases where hose larger than 2½-inch is used it is usually recommended that 2½-inch standard thread be employed so that connections will be interchangeable.



Name of Building: Williams Hall
Location: Southeast corner of the Oklahoma A. & M. College Campus.
Fire Assignment: Engine Co. 2, Engine Co. 1, Squad Co. 6, Engine Co. 3, Ladder Co. 4.
Defense:

Squad Co. 6 will be the first company on location and can be spotted in the driveway at the rear of No. 2 fire station, putting three 1½-inch lines into operation. This squad is to be supplied by a 3-inch hydrant line. If the fire gains beyond the first defense, Squad Co. 6 shall be moved to the hydrant at Maple and Knoblock Streets and supply the deck gun on Ladder Co. 4.

Engine Co. 2 upon arrival sets its monitor at the northeast corner of the building as shown by the drawing. Then lays two reverse lines of 2½-inch hose to the hydrant north of the auditorium and hooks up. These can be used as hand lines if the monitor is not needed.

Engine Co. 3 upon arrival lays the initial 3-inch line to back up Squad 6. It then continues west to the hydrant on the campus and lays a 3-inch hydrant line to the fire. It next lays a reverse line from the west side of the fire to Engine 2, north of the auditorium. Engine 3 then returns to the central fire station to reload and form a reserve.

Engine Co. 1 connects to the hydrant near the front of the fire station and two 2½-inch lines are run out by hand to provide mobile lines. The pumper operator will remove a manhole cover by the hydrant and open valves on the 4-inch water main from the college water system.

Ladder Co. 4 is spotted in the driveway at the rear of fire station No. 2. In this location the ladders are accessible and the deck gun is in position if needed.

In the event of a wind in excess of 15 M.P.H. calls will be made to both Cushing and Perry, Oklahoma, for pumpers to help cover exposures. The police department is to notify property owners to get on roof and protect them against falling embers.

"AKRON BRASS"

MULTIVERSAL NOZZLE

An automatic fire fighter that once put into action needs no further attention — releasing needed manpower for duties at other points.

The Akron Multiversal Nozzle is a one piece unit ready for action as soon as hose lines are connected. In position and under pressure it plays a stream, without attention, as long as necessary. Remarkably flexible. Nozzle turret operating on ball bearings, swings in a complete circle and allows stream to be directed up or down — from an elevation of 90° to 30° above horizontal.

AKRON BRASS MFG. COMPANY, INC.
WOOSTER, OHIO

Deck-pipe type Multiversal Nozzle now in operation on Coast Guard patrol boats.

AKRON BRASS

FIRE FIGHTING EQUIPMENT

TRADE MARK
GAMEWELL
REG. U. S. PAT. OFF.

Specialists in Public Safety
Manufacturers of Emergency Signaling Systems

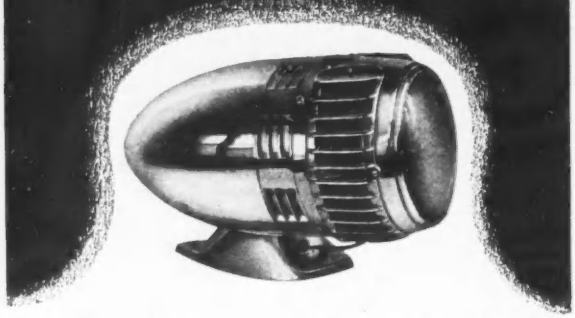
FIRE ALARM
POLICE SIGNALING
AIR RAID WARNING
INDUSTRIAL FIRE ALARM
AUTOMATIC FIRE DETECTION
FIRE & WATCHMEN SUPERVISORY

Two thousand municipalities, several thousand industrial plants and many of the largest institutions now use Gamewell Systems for the protection of life and property and to ensure the permanency of established business.

We freely cooperate in planning protective Signaling Systems.

THE GAMEWELL COMPANY
NEWTON UPPER FALLS, MASSACHUSETTS

For DEPENDABILITY and LONG SERVICE
USE FEDERAL SIRENS



Over 40 years of "sound" engineering is back of every FEDERAL Siren. Each model is designed and constructed to give not only the maximum as a warning signal, but also to withstand many years of hard service—service that can be depended upon in all kinds of weather—day in and day out.

The FEDERAL FURY EXHAUST WHISTLE is available as a warning signal in those communities which still prohibit the use of sirens under wartime conditions. Two new models of oscillating lights are also available for additional protection by a visual warning.

FEDERAL ELECTRIC CO., Inc.
SIREN HEADQUARTERS
8717 So. State Street Chicago 19, Illinois

How a Heavy Stream Behaves

RECENTLY a small group of fire chiefs and fire protection men were watching a fire department try out a new monitor nozzle. The nozzle was being supplied by a 750-gallon-per-minute centrifugal pumper connected to a good hydrant supply. Three 50-foot lengths of 2½-inch hose supplied the nozzle.

The nozzle was first placed in operation with a 2-inch tip and the pump was run at capacity. The discharge pressure at the pump was 80 pounds and it was estimated that the nozzle pressure was about 65 pounds. This would indicate a flow of about 950 gallons per minute. With this flow the residual pressure at the hydrant fell from more than 40 pounds to less than 20 pounds. The stream was good but admittedly could have been better. It lacked reach and was not as solid as would have been desired for the best results when fighting fire. After the stream had been operating for several minutes the pumping station supplying the water mains cut in another pump and the hydrant pressure was brought back up to 40 pounds.

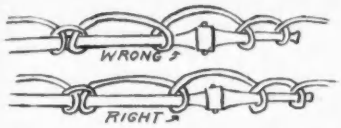
Next the monitor nozzle was tried with a smaller tip, supplied by the same three 2½-inch lines. As the lines were very short the friction loss was small. The pumper was discharging at just below 120 pounds pressure and the nozzle was giving a beautiful stream that held together perfectly for a long distance. At a little over 100 pounds nozzle pressure this stream was throwing out about 700 gallons per minute. While the total amount of water thrown was somewhat less than the first stream, it was the type of a stream that would be very effective at a large fire.

Following this, a 1¼-inch nozzle tip was tried so that the men present might observe the effect of a stream at which too high pressure and too small a nozzle is used. This smaller tip could not take care of the water being delivered by the pumper through three lines of hose and the stream disintegrated into spray the moment it left the nozzle.

ONE of the fire chiefs observing the demonstration remarked: "This type of operation is one of the finest forms of instruction for pump operators because they can see what happens to a stream when they give too much pressure. When a fire appears bad, many operators think that they should step up the pressure whether ordered to do so or not. This only makes mobile lines hard to handle and causes the stream to break up spoiling its effectiveness."

The best fire-fighting experience indicates that pressures between 80 and 100 pounds at the nozzle are best for heavy stream devices such as deluge sets and monitor nozzles that do not have to be held by hand. A 1½-inch nozzle tip is most frequently used in providing heavy streams.

Our Readers Say—



The eagle eye of "Art" Espey, Adviser Fire Training for the Pennsylvania Fire School spotted an imperfect loop or "hitch" in one of the drawings illustrating the article "Simple Hitches for Hoisting" which appeared in the September VOLUNTEER FIREMEN. He has been good enough to sketch the correction shown above.

To THE EDITOR:

"I am writing to you to take exception to several of the statements published in VOLUNTEER FIREMEN for October, on the Murphy Co.'s fire in this city.

"In one paragraph it states that the loss was $268,000 and was one of the largest mercantile losses in the United States during the summer, whereas in my report I estimated the total loss of both merchandise and property at $150,000. The assessed valuation on this property is between $62-64,000, and the management informed me that at no time had they carried over $90,000 worth of stock in the store. This stock was not a total loss as they had a sale for several weeks after, of smoke and water-damaged goods.

"In the last paragraph it states there were 44 fire fighters overcome by smoke and gases. This is true, there were 44 overcome, but, the majority were citizens who volunteered. Only 12 of the ones overcome were members of the department."

CHIEF J. C. MCALLISTER,
McKeesport, Pa.

The fire loss figure used in VOLUNTEER FIREMEN was based upon a report by the Middle Department Rating Association, Allegheny Division, giving the final adjusted fire loss. No doubt the increase in values to both building and contents due to wartime prices explain the higher loss. The assessed valuation of the building was only half of its true value at the time of the fire. — Ed.

To THE EDITOR:

"Thanks for calling our attention to the deadline on our membership. We certainly cannot fail to get our VOLUNTEER FIREMEN. This VOLUNTEER FIREMEN may be small but it sure is chuck full of real stuff and when they reach my department and I hand them out to my men I just cannot get any attention until the last word is read.

"Congratulations to your staff and keep the fine articles coming."

CHIEF W. R. GRANT,
Russellville, Alabama.

CAN YOU USE A BELL?

The Whitneyville Volunteer Fire Company of Hamden, Conn., writes that it wishes to dispose of a 700-pound fire bell and frame. Anyone interested in acquiring an alarm bell of this size should communicate with Mr. Fred J. Morton, Recording Secretary, Whitneyville Vol. Fire Co., 2802 Whitney Ave., Hamden, Conn.

HELP WANTED!

We need a single man, aged 38 to 50 years, draft exempt, and having some knowledge of fire apparatus for work as permanent bunkman and driver. Sleeping quarters furnished. For full information apply Fire Chief J. Matteis, Los Altos, Calif., stating qualifications and pay expected.

INDIAN
PORTABLE FIRE PUMPS

Easy pumping, throws 30 to 50 ft. pressure stream or nozzle adjusts to a spray.

No fire fighting apparatus has greater speed and all 'round use than **INDIAN FIRE PUMPS.** Off the truck — no hose to lay — on the job — stream or spray — smash the fire — back to the station. If you never used **INDIANS** you'll wonder how you ever managed without them. Over 70% of your calls can be handled with **INDIAN FIRE PUMPS** alone. Rust-proof 5 gal. tank carries by handle or slung on back, thus permitting operator to move about quickly without having to stop and pick up the extinguisher.

★

SEND FOR CATALOG AND TESTIMONIALS.

★

D. B. SMITH & CO. 412 Main St. UTICA, NEW YORK
PACIFIC COAST BRANCH: Hercules Equipment & Rubber Co.
435 Brannan Street, San Francisco, California

On Guard
—WHEREVER DUTY CALLS!
The Streamlined
M·S·A
FIREMAN'S HELMET

This favorite modern Helmet has what it takes to meet the fireman's new head protection demands! Laminated bakelite, one piece molded, provides tremendous resistance to impact — the Helmet can't soften from exposure to water, grease, or common chemicals — supplies balanced comfort and wearing ease through long hours of emergency duty. Write for Bulletin No. DX-5!

MINE SAFETY APPLIANCES CO.
BRADDOCK, THOMAS AND MEADE STREETS,
PITTSBURGH, PA.
District Representatives in Principal Cities

TRILBY FIRE DEPT.
WASHINGTON TOWNSHIP
TO REPORT A FIRE OR CALL RESCUE SQUAD IN WASHINGTON TOWNSHIP (TRILBY DISTRICT) DIAL OPERATOR AND SAY,
"I WANT TO REPORT A FIRE"
OR
"I WANT THE RESCUE SQUAD"
WHEN REPORTING A FIRE GIVE CORRECT STREET ADDRESS OR LOCATION. ALSO STATE TYPE OF FIRE, BUILDING OR GRASS.
If unable to get FIRE STATION by phone, go or send someone to Fire Station where you will find a small red box on front of building, open it and push BUTTON
REMAIN THERE UNTIL FIREMEN ARRIVE.
1944
JANUARY
1944
SUN MON TUE WED THU FRI SAT
1 8 15 22 29
2 3 4 5 6 7
9 10 11 12 13 14
16 17 18 19 20 21
25 26 27 28

THE calendar shown above is issued by the Trilby Volunteer Fire Department, Washington Township, West Toledo, Ohio (Member N.F.P.A.), as a means of raising funds for the up-keep of the organization. This is done with the cooperation of the Township Trustees. These calendars (approximately 8 by 12 inches in size) are distributed to every home within the district served by the company in an area of 16 square miles.

Each fall the firemen sponsor a masked ball to raise funds. The fifteenth annual ball, just held, was the most profitable in the history of the department. President Eugene Church, of the Trilby Fire Department, writes that the proceeds of this dance will be applied toward the purchase of a new rescue truck carrying first-aid supplies, inhalator, resuscitator, and other equipment. The present rescue car which "is worth its weight in gold" is to be rebuilt to carry the department's 1250 Watt lighting plant, extra hose and other equipment.

The campaign procedure is to divide the fire district into territories and assign a captain for each. Men are picked to help each captain and a house to house campaign is made. A calendar is left at every home, questions regarding the fire department are answered and the dance tickets are disposed of.

As shown above, the calendars serve a useful purpose besides that of raising funds for the department. They tell each resident how to give an alarm for a fire, or a rescue squad call. On the back of the calendar are printed sections of the Ohio state law relating to the kindling of outdoor fires. When the calendars are distributed these laws are called to the attention of every resident. This has helped to reduce the number of calls due to rubbish and grass fires.

The department has the latest type of fire-fighting equipment, including two Buffalo pumpers with enclosed cabs, as shown above. Not shown in the picture are two skid pumps that are being mounted on trucks, and a Model T Ford chemical truck which was the first fire apparatus in Trilby.

CHIEF ELDEN LAFOLLETTE has reported that nearly two hundred fire and rescue alarms were answered during the first ten months of this year. This is an increase over previous years, due to the growth of the community. Fire drills are held at least once each week under the supervision of Drill Master Robert Finch. Five captains are appointed to have direct charge of the drills on consecutive weeks. The department has its own drill tower.

Besides fire fighting and rescue work the department has been very active in the athletics of the community, having sponsored softball, baseball, and basketball teams and contributed to the Trilby playground fund.

At the present time there are 37 active firemen, all fully uniformed. Eighteen members of the department are in the military service, of whom at least six are overseas. The department has purchased three $1,000 bonds and has set up a fund for each member in the armed services.

•

An Interesting Magnesium Fire

CHIEF HERMAN E. GUTHEIM, Fire Department, Cambridge, Mass., reports a very interesting case in which intelligent handling controlled a serious magnesium fire. The fire department report reads as follows:

"On July 26, 1943, at 2:45 A.M., Engine Company No. 5 and Ladder No. 2, under command of Deputy Chief Joseph H. Caldwell, were dispatched to a still alarm for a fire in the plant of the Castalloy Company in Cambridge.

"The fire was found to be in a large oven in a one-story building of first-class construction. Magnesium parts were being treated, and because of the failure of the controlling device to operate, the oven overheated and the magnesium took fire. The heat was so intense that the steel racks on which the magnesium parts rested had melted and the molten metal was coming out under the lower doors of the oven.

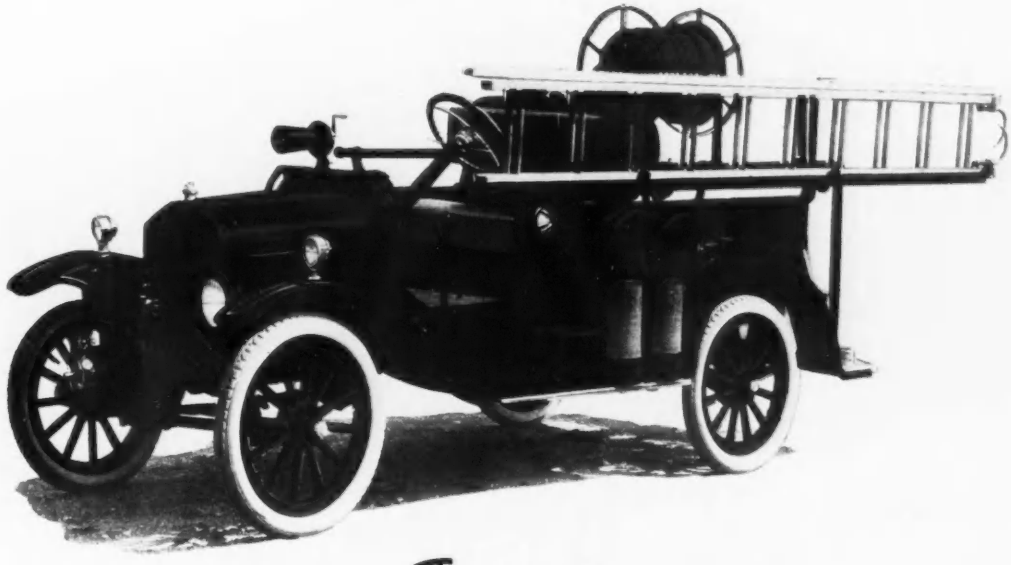
"The engineer of the firm, who was familiar with handling magnesium, arrived early on the scene and preparations were made to open doors as soon as conditions permitted. Drains were made to a nearby sewer by banking up earth to keep the burning metal from setting fire to other parts of the building. Electric switches and cyclones were shut off. One door of the oven was partly opened and three barrels of G-1 powder were shovelled in over the magnesium to give a blanketing effect. Windows in the upper walls were opened for ventilation.

"Engine company attached to hydrant and two 2½-inch lines were laid to the fire. A fog applicator nozzle was attached to one line. As soon as all doors could be opened the fog nozzle was placed in operation. This was used for one hour and twenty minutes, when the fire was extinguished. If a solid stream had been used it probably would have blown the oven to pieces, and perhaps the whole building would have been lost."

BUY WAR BONDS!

21 YEARS of PROGRESS

— From 1922 —



— To 1943 —

WE HAVE KEPT PACE WITH THE AUTOMOTIVE INDUSTRY

THE WELL KNOWN BARTON-AMERICAN FRONT-MOUNTED FIRE PUMPS ARE ADAPTABLE TO ANY COMMERCIAL TRUCK CHASSIS. CONVERT YOUR PRESENT AUXILIARY TRUCK INTO THAT MUCH NEEDED PUMPER.

AMERICAN-MARSH PUMPS, INC.

CENTRIFUGAL, TURBINE, STEAM, AND POWER PUMPS

BATTLE CREEK, MICHIGAN . . . . PUMPS AND PUMPS ONLY SINCE 1873

Like the fabled Old Gray Mare, this wartime Fire Hose "ain't whut she usta be" either — and *that* "ain't no fable." Not only has quality been cut — of necessity, of course — but, with the exceptions of Army, Navy, Lend-Lease and a very few others, double jacket hose is practically unavailable.

And fire chiefs everywhere report the light weight, single jacket hose as unsuitable for municipal use. Don't blame the hose manufacturers for this — they are making it as good as is permitted under WPB restrictions — and don't forget — they are as anxious to get their good, old reliable, trade-marked brands back on the market as you are to have them.

What are **YOU** going to do about it? Why, do all you can to **MAKE YOUR HOSE LAST LONGER**

CIRCUL-AIR THE AIR CONDITIONING **FIRE HOSE DRYERS**

Will help you do that — and will do a *better job* of drying your hose in 1/10th of the time — in ¼ the space — with ½ the labor — *or less*. Thus, a **PEACE TIME ASSET** becomes a **WARTIME NECESSITY**. Saves a lot of space, too, as well as building and repair costs, and *improves new station design*.

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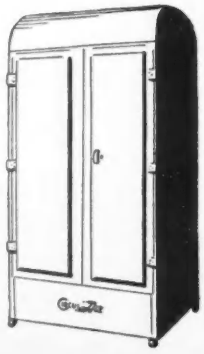

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Making Rope Last Longer

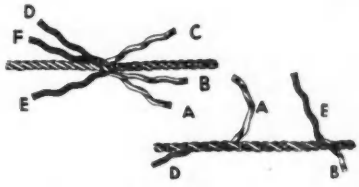
(*Continued from Page 12*)

increasing wear and friction load. False economy leads to the use of blocks and sheaves too small for the diameter of the rope. A sharp bend reduces the tensile strength of rope by putting extra strain on the outer fibers. Do not attempt to add lubrication to your rope. Lubrication built into good rope is adequate for its entire life. Under conditions where a rope must necessarily run over some surface such as cleats and winch heads, be sure that the surface is smooth.

Knots Are Only ½ as Strong as Splices

Splices are much better and stronger than knots for permanent connections, since the best knot reduces the strength of a rope approximately 50%. Should a rope become damaged, cut and splice. A good splice is safer than a damaged section.

The "Short" Splice is the strongest method of joining ropes, but it should not be used on pulley work as the rope is nearly doubled in size, exposing the strands to extra chafing.



The "Long" Splice is adapted for pulley work and is nearly as strong as the "Short" Splice. It is not suitable, however, for Transmission and Ski-Tow Splices where a very special type of splice is required. Detailed information concerning any of these types of splices will be furnished on request.

Play Safe! Be Thrifty!

Reverse ropes, end for end, periodically, as in tackle use, so that all sections of the rope will receive equal wear.

IN addition to their pamphlet "Making Rope Last Longer" from which the material used in this article was digested, the Plymouth Cordage Company has issued two other pamphlets that would be very useful to almost every fire department. One of these is entitled "Lift it Safely." The other booklet is "Useful Knots and How to Tie Them." Fire departments desiring copies of these booklets should write direct to the Plymouth Cordage Company, North Plymouth, Massachusetts, and copies will be sent as far as they are available.

Official U. S. Navy Photograph

Members of an anti-aircraft machine gun battery at battle stations after repelling a Japanese bomber attack on a U. S. Aircraft Carrier.

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Ready for Action!

The fire, caused by previous enemy attack, has been extinguished with foam — some is still visible on the deck, guns and even on the gunners' helmets — and the gun crew is ready for the enemy again.

Fighting the enemy effectively often depends on the efficiency of fighting fires caused by enemy action.

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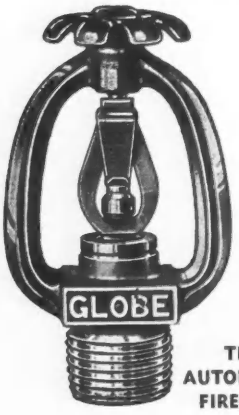

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INSPECTION and SOUND ADVICE.

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OFFICES IN PRINCIPAL CITIES

MEMBERSHIP REPORT

N. F. P. A. Volunteer Firemen's Section

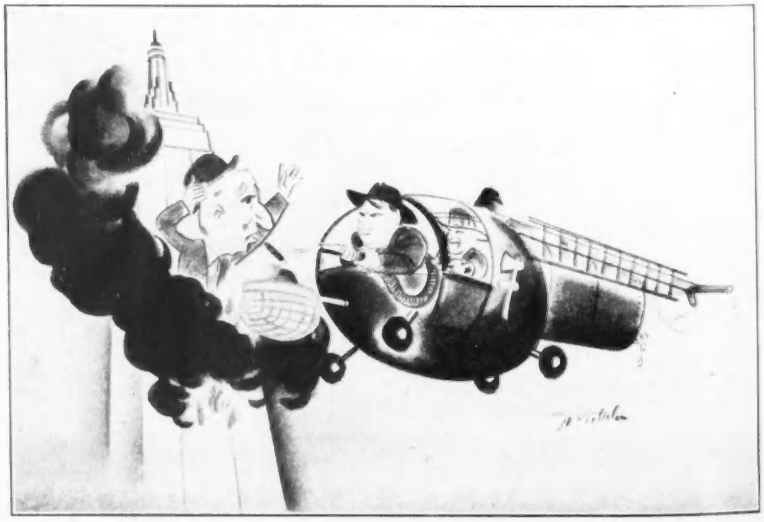
LAST month 62 fire departments with 788 men were newly enrolled in the N.F.P.A. Volunteer Firemen's Section which now has a total of 996 departments with 17,908 firemen enrolled. The new members are listed below:

Cottonwood Fire Department, Cottonwood, Calif.
Los Altos Fire Department, Los Altos, Calif.
Eagleville Fire Department, Eagleville, Conn.
Cos Cob Fire Company No. 1, Cos Cob, Conn.
Post Engineer, Elgin Field, Fla.
Cicero Fire Department, Cicero, Ind.
Valparaiso Fire Department, Valparaiso, Ind.
Grinnell Fire Department, Grinnell, Iowa
Nevada Fire Department, Nevada, Iowa
Jennings Fire Department, Jennings, La.
Bel Air Volunteer Fire Company, Bel Air, Md.
Odenton Volunteer Fire Company, Odenton, Md.
Burlington Fire Department, Burlington, Mass.
Bean Fire Department, Lansing, Mich.
Coldwater Fire Department, Coldwater, Mich.
Gratiot Township Fire Department, Detroit, Mich.
Hillsdale Hose Co., Hillsdale, Mich.
Romeo Fire Department, Romeo, Mich.
Roseville Fire Department, Roseville, Mich.
Edina Volunteer Fire Department, Minneapolis, Minn.
Cuba Volunteer Fire Department, Cuba, Miss.
Wahoo Volunteer Fire Department, Wahoo, Neb.
Absecon Volunteer Fire Department, Absecon, N. J.
Long Hill Volunteer Fire Company No. 2, Chatham, N. J.
Roseland Volunteer Fire Department, Roseland, N. J.
Edgewood Hose Company No. 2, Rotterdam, Schenectady, N. Y.
Florida Fire Company, Florida, N. Y.
Georgetown Fire Department, Georgetown, N. Y.
Gouverneur Volunteer Fire Department, Gouverneur, N. Y.
Hook & Ladder Company No. 1, Morrisville, N. Y.
Marcellus Fire Department, Marcellus, N. Y.
Northville Fire Department, Northville, N. Y.
Ontario Hose Company No. 3, Norwich, N. Y.
Orchard Park Fire Co., Orchard Park, N. Y.
Port Byron Fire Department, Port Byron, N. Y.
Richmondville Fire Department, Richmondville, N. Y.
Trumansburg Fire Department, Trumansburg, N. Y.
West Corners Fire Department, Union, N. Y.
Lake Placid Fire Department, Lake Placid, N. Y.
Elmore FireDepartment, Elmore, Ohio
Lyndhurst Fire Department, Lyndhurst, Ohio
Volunteer Firemen of Navarre, Navarre, Ohio
Waco Aircraft Company, Fire Brigade, Troy, Ohio
Claremore Fire Department, Claremore, Okla.
El Reno Fire Department, El Reno, Okla.
Holdenville Fire Department, Holdenville, Okla.
Seminole Fire Department, Seminole, Okla.
Sulphur Fire Department, Sulphur, Okla.
Chickasha Fire Department, Chickasha, Okla.
Acme Hose Company E, Stroudsburg, Pa.
Cetronia Fire Company No. 1, Allentown, Pa.
Fullerton Fire Company No. 1, Fullerton, Pa.
West Sayville Fire Department, West Sayville, Pa.
Jellico Fire Department, Jellico, Tenn.
Coleman Fire Department, Coleman, Texas
Higgins Volunteer Fire Department, Higgins, Texas
Puyallup Fire Department, Puyallup, Wash.
Chetek Volunteer Fire Department, Chetek, Wis.
Tobin Toll & Die Company, Fond du Lac, Wis.
Hudson Bay Mining & Smelting Co., Ltd., Flin Flon, Man.
Swastika Volunteer Fire Brigade, Swastika, Ont.

MEMBERSHIP PLAN

- Through the Volunteer Firemen's Section, fire companies may become N.F.P.A. members. Each member fire company is entitled to have VOLUNTEER FIREMEN magazine sent to the homes of ten firemen.
- As a member, the fire company receives at headquarters a set of all other regular N.F.P.A. publications. This includes the QUARTERLY MAGAZINE and monthly NEWS LETTER.
- Membership in the National Fire Protection Association costs ten dollars per year. If more than ten firemen want to receive the magazine, an additional one dollar should be sent for each additional fireman enrolled.

PETER PIRSCH ROTASPRITZER



Joseph S. Pecker, Chairman of the Board of RotaWings, Inc., Aeronautical Research Organization, sent us the above picture of a Peter Pirsch "Rotaspritzer" in which Mayor LaGuardia is envisioned in the act of rescuing Al Smith from a fire in New York's Empire State Building. Readers of VOLUNTEER FIREMEN will recall that a drawing by Mr. Pirsch of the "Fire Engine of Tomorrow" appeared in the August issue. Mr. Pecker, of RotaWings, writes, "All jesting aside, the helicopter has tremendous possibilities for fire fighting, especially in the preservation of our forests and in the case of disaster."

Fire Chiefs want OREN

because it is dependable, modern, efficient.

A combination OREN service unit recently purchased by Defense Plant Corporation, an instrumentality of the United States Government, for fire and complete first aid protection . . . . . .

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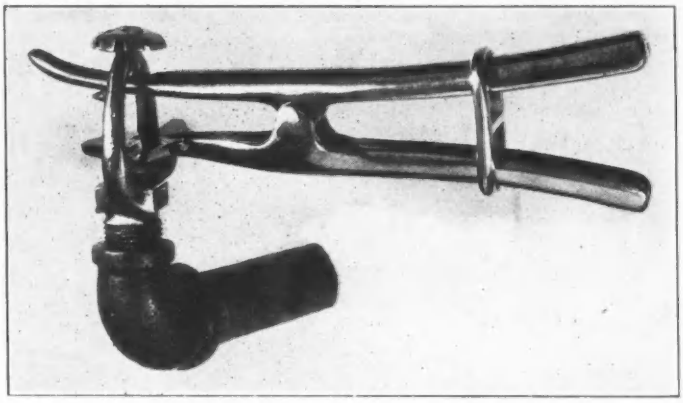

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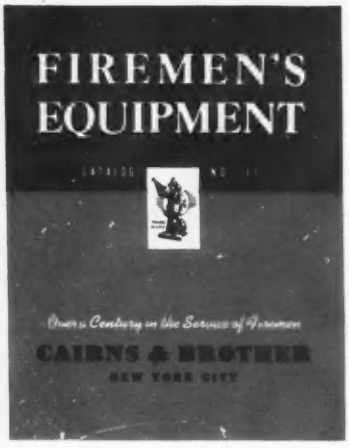


CAIRNS & BROTHER, of New York City, has just issued the handsome new catalogue illustrated above. Known as Catalogue No. 31, it covers in detail the wide range of firemen's helmets and other supplies offered by this 107-year-old firm. Most people naturally associate the name Cairns & Brother with firemen's helmets, which has been their principal line for more than a century, but this new catalogue emphasizes also firemen's clothing, belts, flags, banners, and office and secretarial equipment. A copy of this catalogue will be sent to any fire company or department requesting one on their official letterhead. Address your request to CAIRNS & BROTHER, 444 Lafayette St., New York 3, N. Y.

●

WITH the approach of winter, fire pails, water barrels and similar fire protection facilities must be protected from freezing. Where these facilities are to be subjected to freezing temperatures, measures must be taken to lower the freezing point of the water so that it will remain in a fluid state despite the weather. The SOLVAY SALES CORPORATION, 40 Rector St., New York 6, N. Y., offers complete details on the use of calcium chloride for this purpose. Write for a copy of the booklet entitled, "How to Obtain Dependable Fire Protection at Little Cost."

●

WILLIAM T. COLE, 81, for 30 years president and general manager of the FABRIC FIRE HOSE COMPANY, division of United States Rubber Company in Sandy Hook, Conn., died October 9th, at his home in Newtown, Conn. Mr. Cole started work with the Fabric Fire Hose Company as a salesman in 1892. In 1903 he became general manager. Eight years later he was appointed president and continued as general manager, positions he held for the next 30 years. When he was nearly 80 years old, Mr. Cole retired from active service. His son, Charles S. Cole, was appointed president and factory manager in 1941.

●

THE "Squeeze-Grip" type valve for hand-type carbon dioxide fire extinguishers, originated and developed by the C-O-TWO FIRE EQUIPMENT COMPANY, Newark, N. J., has been adopted as standard by the U. S. Navy Bureau of Ships, according to an announcement currently released by the C-O-Two Company. The valve has also passed tests of the U. S. Bureau of Standards and is on the approved listing of the Coast Guard Merchant Marine Committee for use on passenger and cargo vessels. In line with this approval, the new valve is now being specified exclusively for all new carbon dioxide hand-type extinguishers for use on Navy ships and also for those being furnished to the Bureau of Aeronautics, Yards and Docks and the Coast Guard. Other agencies of the armed services which have approved the valve, and to which it is now being regularly supplied, are the Air Corps, Signal Corps, Engineers, Ordnance and Quartermaster branches of the Army.

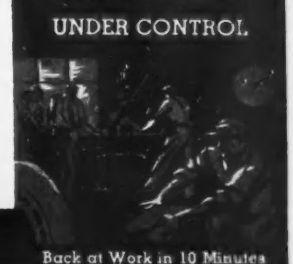
●

THE OREN FIRE APPARATUS COMPANY, of Roanoke, Va., has issued an illustrated booklet showing several models of its line of fire apparatus. A copy will be sent on request to the manufacturer.

Squeez-Grip

The Valve That Speeded-Up Carbon Dioxide Portable Fire Extinguishers from fast to FASTEST

Carbon dioxide has always been the fastest non-damaging fire extinguishing agent for use against certain types of fires. In originating the SQUEEZ-GRIP valve C-O-TWO now has ended the delaying action, loss of gas and waste motion of setting down a portable carbon dioxide extinguisher to operate a hand-wheel valve. The SQUEEZ-GRIP valve now makes possible the release of carbon dioxide gas against fire as fast as you can close your hand. The SQUEEZ-GRIP valve on all size C-O-TWO portables can be opened or closed instantly, while being carried. C-O-TWO SQUEEZ-GRIP is Safer—It's Faster.



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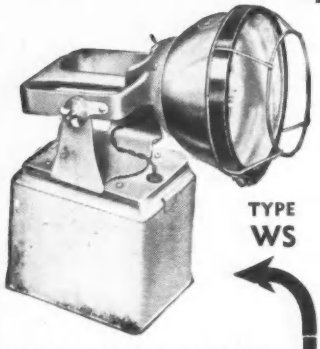

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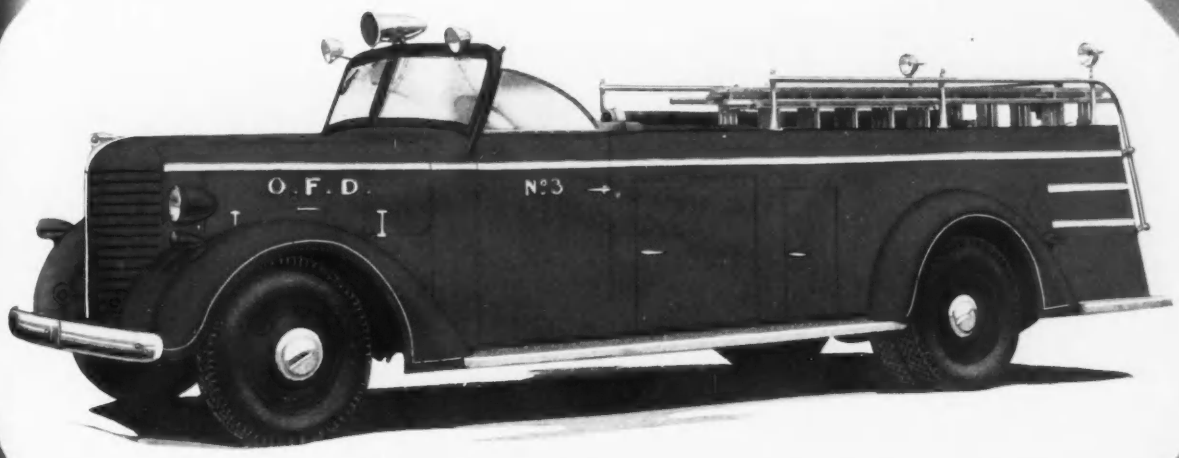
Wartime, The N.F.P.A. in	Nov.	10
Washington, D. C., Pumping Record	Nov.	5
Wizard, Six-Year-Old Fire Service	Oct.	24



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